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LISTS OF SPECIES

Flowering plants of the Grota do Angico Natural Monument, Caatinga of Sergipe, Brazil

Ana Cecília da Cruz Silva [1*], Ana Paula do Nascimento Prata [2] and Anabel Aparecida de Mello [3]

1 Universidade Federal de Sergipe, Programa de Pós-graduação em Ecologia e Conservação – PPEC, CEP 49100-000, São Cristóvão, SE, Brasil.
2 Universidade Federal de Sergipe, Programa de Pós-graduação em Ecologia e Conservação – PPEC, CEP 49100-000, São Cristóvão, SE, Brasil.
3 Universidade Federal de Sergipe, Departamento de Ciências Florestais, CEP 49100-000, São Cristóvão, SE, Brasil.
* Corresponding author. E-mail: *cecilia.bio@bol.com.br*

ABSTRACT: The purpose of this study was to survey the Angiosperms from an area of Caatinga, in the Grota do Angico Natural Monument, state of Sergipe, Brazil. A total of 174 species and 51 families were registered. Fabaceae (29 species) is the family with the highest number of species, followed by Asteraceae (11), Euphorbiaceae (10), Malvaceae and Poaceae (9 each) and Rubiaceae (8), Bromeliaceae, Cactaceae and Convolvulaceae (7 each). Most species are herbaceous (55.2%), followed by trees (20.7%), shrubs and vines (7.5% each), subshrubs (6.3%), epiphytes (1.7%) and hemiparasites (1.2%). Approximately 17% (30 species) of the flora are endemic to the Caatinga, one species is rare and two are vulnerable. Our results reinforce the importance of conserving the remaining forest vegetation against the anthropic pressure.

INTRODUCTION

The Caatinga, also known as Seasonal Dry Tropical Forest (Pennington *et al*. 2004), covers most of the area in the northeast semiarid region (Andrade-Lima 1981). In general, it is characterized as a forest of low stature, composed of trees and shrubs that often have thorns, succulents and a herbaceous stratum that is present only during the short rainy season (Cardoso and Queiroz 2007). Besides the high floristic diversity, with at least 932 Angiosperm species, it also has a high degree of endemism (Giulietti 2003) and different types of vegetation (Prado 2003), which are responsible for the high environmental heterogeneity (Silva *et al.* 2003).

A large portion of the Caatinga presents increased anthropic action and 45.3% of its area is degraded (Santos and Andrade 1992). Currently, it is the third biome most changed by man in Brazil, after the Atlantic Forest and the Cerrado (Castelletti *et al*. 2003). Still, the Caatinga contains the lowest rate and smallest protected area amongst all biomes (Leal *et al*. 2005).

The Grota do Angico Natural Monument is an area of extreme biological importance (Giulietti 2003) and has been greatly modified due to human action. Recently, there has been an increase in research with the biota in this Protected Area (Ribeiro 2007; Ruiz-Esparza *et al.* 2011; Santana *et al*. 2011), but there are few studies on the flora (Ferraz 2009). This study was conduced to determine the Angiosperms floristic composition from an area of Caatinga, in the Grota do Angico Natural Monument, aiming to increase the knowledge of the flora in this Area Protected.

MATERIALS AND METHODS

The study was conducted in an area of 251 ha in a fragment of Caatinga in the Grota of Angico Natural Monument (09°39'53.5"S and 09°39'56.0"S; 37°40'10.3" W and 37°41'06.9" W), which has a total area of 2,183 ha and is situated in the High Wilderness of Sergipe, in the municipalities of Canindé do São Francisco and Poço Redondo, with the São Francisco River on its northern boundary (Semarh 2009) (Figure 1). The area has megathermal semiarid climate, rainfall 500-700 mm/year (Santos and Andrade 1992). The average annual temperature is 26-28^{oC} and insolation is more than 3,000 h/year (Duarte 2002). The vegetation is represented by two types of forest: dense deciduous hiperxerophilous forest and open vegetation in regeneration stages, with grazing and abandoned areas with saline soils (Ribeiro and Mello 2007).

The floristic survey is based on monthly collection of reproductive material through walks across the area of study, from August 2009 to July 2010. The voucher material is deposited in the Herbarium of the Federal University of Sergipe (ASE). The familiar classification follows APG III (2009) and the spelling of species names was verified by electronic consultation with the Missouri Botanical Garden (2013) and Forzza *et al.* (2013).

The floristic list includes common names, habit, and some categories, such as Caatinga endemics (Giulietti *et al.* 2002; Cardoso and Queiroz 2007; Queiroz 2009), endangered in Brazil (MMA 2008) or in the world (IUCN 2010) and rare in Brazil (Giulietti *et al*. 2009). The SEMARH (Department of Environment and Water Resources) provided the research permit.

RESULTS AND DISCUSSION

The floristic survey of the MONA Grota do Angico presented 174 species and 51 families of Angiosperms (Table 1). Fabaceae, with 29 species (12 in Faboideae, 9 in Mimosoideae, and 8 in Caesalpinioideae) was the most representative family in number of species. In Caatinga, this is the most important group floristically (Queiroz 2006). Other families that deserve mention are Asteraceae (11 species), Euphorbiaceae (10), Malvaceae and Poaceae (9 each), Rubiaceae (8), and Bromeliaceae, Cactaceae and Convolvulaceae (7 each). Together, these nine families

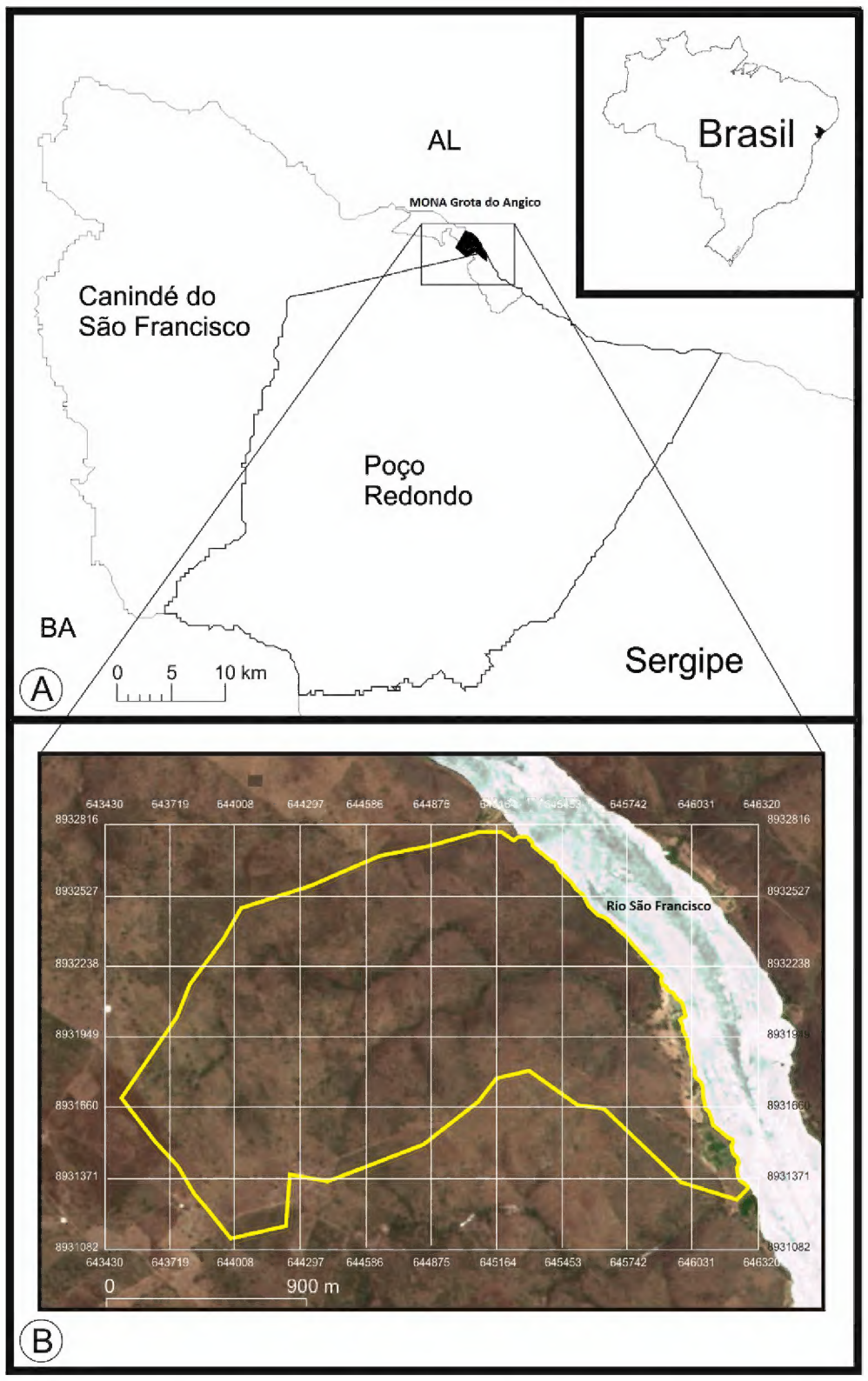

FIGURE 1. Location of study area in the Grota of Angico Natural Monument, Canindé do São Francisco and Poço Redondo, Sergipe, Brazil.

account for 55,7% of all sampled species. A large number of families are poorly represented in the area, 23 of them by only one species (Table 1). These data, along with other surveys conducted in the Caatinga, point to a tendency a great part of plant diversity is concentrated in few families (Araújo *et al*. 1995).

There is a higher percentage of herbaceous plants, with 96 species (55.2%), followed by trees (20.7%), shrubs and vines (7.5% each), subshrubs (6.3%), epiphytes (1.7%) and hemiparasites (1.2%). The high number of herbaceous plants was also found in other areas of Caatinga (Reis *et al*. 2006; Costa *et al.* 2009; Santos *et al*. 2009; Silva *et al.* 2009). The predominance of herbaceous species is likely characteristic of other areas, but most floristic and phytosociological studies in Caatinga, including in Sergipe, are focused on woody species, preventing a more effective analysis of the plant community. Fabaceae presented the highest richness of herbaceous species per family (14: 11 in Faboideae and 3 in Caesalpiniodeae), followed by Asteraceae (10), Poaceae (9) and Malvaceae (8). These families were predominant in different habitats of Caatinga, such as rocky, flat and gallery microhabitats (Araújo *et al.* 2005; Reis *et al.* 2006), crystalline and sedimentary areas (Silva *et al.* 2009), and caatinga *s. str.* (Costa *et al.* 2009).

Forty-nine species, representing 23 families are trees and shrubs. Fabaceae, with 12 species, presented the highest number of woody species (9 in Mimosoideae and 3 in Faboideae), followed by Euphorbiaceae (7), Rubiaceae (4), and Anacardiaceae and Cactaceae (3 each). These families have also presented high representativeness in this stratum in other surveys in Caatinga (Amorim *et al*. 2005; Fabricante and Andrade 2007), including in the state of Sergipe (Souza 1983; Fonseca 1991; Dória Neto 2009; Ferraz 2009; unpublished data). The exception is Rubiaceae, which according to Ferraz *et al.* (1998), is characteristic of areas with higher rates of precipitation and relative humidity and lower temperatures. The results found in this work coincide with the information listed previously, since *Chomelia obtusa*, *Machaonia brasiliensis*, *Tocoyena formosa* and *Tocoyena sellowiana* were collected near the edge of the São Francisco River.

The vines deserve prominence for the considerable number of species (13), representing six families, of which Convolvulaceae, with six species, is the best represented. Similar numbers were found by Alcoforado-Filho *et al.* (2003) and Araújo *et al.* (2005) in other areas of the Caatinga. Epiphytes showed a low number, with only three species of Bromeliaceae.

In this survey, 36 species (20.7%) are endemic to the Caatinga (Table 1); similar numbers were found by Lacerda *et al.* (2007) in a riparian area of this biome. Cactaceae and Fabaceae presented the highest number of endemic species (6 and 5, respectively). Two species (*Myracrodruon urundeuva* and *Schinopsis brasiliensis*) belong to the vulnerable category in the official list of endangered species of Brazilian flora. A rare species, *Lippia pedunculosa,* was also collected. Despite being the only rare species found in the study area, its presence is significant because, according to Giulietti *et al.* (2009), rare species occur in Brazil on average every 3,730 km^2. The results of this study demonstrate that the dominant families are similar to other families in Caatinga habitats and that the herbaceous, usually neglected in floristic and phytosociological studies, has a great importance in local diversity. The presence of rare species and other endemic and vulnerable to extinction emphasize the importance of this Protected Area and justify greater protection against the anthropic pressure.

Table 1. List of families and species of flowering plants from the Grota of Angico Natural Monument, with common names, habits, categories and voucher numbers (ASE), Sergipe, Brazil. Habit: Epi = epiphytic; Her = herbaceous; Hpa = hemiparasite; Shr = Shrurb; Ssh = subshrub; Tre = tree; Vin = herbaceous vine or woody vine. Categories: End = endemic; R = rare; VU = vulnerable.

FAMILY / SPECIES	COMMON NAME	HABIT	CATEGORY	VOUCHER
Acanthaceae				
Ruellia asperula (Mart. and Nees) Lindau	Camaratu	Her	-	15678
Ruellia bahiensis (Nees) Morong	Papa-conha	Her	-	16466
Amaranthaceae				
Alternanthera ficoidea (L.) P. Beauv.	Erva-de-ovelha	Her	-	14556
Amaryllidaceae				
Habranthus sylvaticus Herb.	Alho-bravo	Her	-	20303
Anacardiaceae				
Myracrodruon urundeuva Allemão	Aroeira-do-sertão	Tre	VU	15699
Schinopsis brasiliensis Engl.	Braúna	Tre	VU	17874
Spondias tuberosa Arruda	Umbuzeiro	Tre	End	15725
Apocynaceae				
Aspidosperma pyrifolium Mart.	Pereiro	Tre	End	15726
Calotropis procera (Aiton) W.T. Aiton	Algodão-de-seda	Shr	-	14546
Matelea nigra (Decne.) Morillo and Fontella	Porquinho-do-mato	Vin	-	14628
Asteraceae				
Bidens pilosa L.	Carrapicho-de-agulha	Her	-	14626
Centratherum punctatum Cass.	Vassoura-de-botão	Her	-	14553
Conocliniopsis prasiifolia (DC.) R.M. King and H. Rob.	Balaio-de-veio	Her	-	14594
Emilia sonchifolia (L.) DC.	-	Her	-	16480
Eclipta prostrata (L.) L.	Lava-arisco	Her	-	16508
Mikania cordifolia (L. f.) Willd.	-	Vin	-	16503
Tridax procumbens L.	Olho-de-ovelha	Her	-	15677
Vernonia sp.	Anil	Her	-	15698
Sp.	Maniquê	Her	-	14573
Sp.	Erva-besteira	Her	-	15685
Sp.	Pimenta-brava	Her	-	16500
Bignoniaceae				
Tabebuia aurea (Silva Manso) Benth. and Hook. f. ex S. Moore	Craibeira	Tre	-	15934
Boraginaceae				
Heliotropium angiospermum Murray	-	Her	-	14561
Heliotropium procumbens Mill.	Erva-ferro	Her	-	16482
Varronia globosa Jacq.	Pau-de-sapo, sapeiro	Shr	End	16471
Bromeliaceae				
Bromelia laciniosa Mart.	Macambira-de-preá	Her	-	15916
Encholirium spectabile Mart. ex Schult. f.	Macambira-de-flecha	Her	End	15917
Hohenbergia catingae Ule	Gravatá	Her	End	17494
Neoglaziovia variegata (Arruda) Mez	Croá	Her	End	15933
Tillandsia loliacea Mart. ex Schult. f.	-	Epi	-	15927
Tillandsia recurvata (L.) L.	-	Epi	-	15909
Tillandsia streptocarpa Baker	-	Epi	-	15928
Burseraceae				
Commiphora leptophloeos (Mart.) J.B. Gillett	Imburana-de-cambão	Tre	End	16462
Cactaceae				
Cereus jamacaru DC.	Mandacaru	Tre	End	16461
Harrisia adscendens (Gürke) Britton and Rose	Bugi	Her	End	15931
Melocactus zehntneri (Britton and Rose) Luetzelb.	Cabeça-de-frade	Her	End	-
Opuntia inamoena K. Schum.	Palma-brava	Her	End	15932
Pilosocereus gounellei (F.A.C. Weber) Byles and G.D. Rowley	Xique-xique	Shr	End	-
Pilosocereus pachycladus F. Ritter	Facheiro	Tre	End	-
Tacinga palmadora (Britton and Rose) N.P. Taylor and Stuppy	Quipá	Her	-	14559
Cannabaceae				
Celtis iguanaea (Jacq.) Sarg.	Juá-mirim	Tre	-	15902
Capparaceae				
Cynophalla flexuosa (L.) J.Presl.	Feijão-bravo	Tre	End	15900
Celastraceae				
Maytenus rigida Mart.	Bom-nome	Tre	End	15907
Chrysobalanaceae				
Couepia uiti (Mart. and Zucc.) Benth. ex Hook. F.	Oiti	Tre	-	15901

Table 1. ***Continued.***

FAMILY / SPECIES	COMMON NAME	HABIT	CATEGORY	VOUCHER
Combretaceae				
Combretum lanceolatum Pohl ex Eichler	Mofumbo	Shr	-	15672
Commelinaceae				
Commelina diffusa Burm. f.	Olho-de-santa-luzia	Her	-	15911
Commelina erecta L.	Barba-de-bode	Her	-	14582
Convolvulaceae				
Evolvulus elegans Moric.	-	Her	-	14558
Ipomoea brasiliana Meisn.	Batata-de-caititu	Vin	End	16496
Ipomoea megapotamica Choisy	Ritirana	Vin	-	17514
Ipomoea nil (L.) Roth	Ritirana	Vin	-	17513
Ipomoea pes-caprae (L.) R. Br.	Salsa	Vin	-	15894
Jacquemontia corymbulosa Benth.	Cipó-capela	Vin	-	17503
Merremia aegyptia (L.) Urb.	Ritirana-cabeluda	Vin	-	14606
Cyperaceae				
Cyperus ligularis L.	Tiririca	Her	-	15882
Cyperus odoratus L.	Tiririca	Her	-	16507
Cyperus surinamensis Rottb.	Tiririca	Her	-	15913
Fimbristylis dichotoma (L.) Vahl	Tiririca	Her	-	15914
Fimbristylis littoralis Gaudich.	Tiririca	Her	-	16506
Euphorbiaceae				
Acalypha multicaulis Müll. Arg.	Assa-peixe	Her	-	16499
Cnidoscolus urens (L.) Arthur	Cansanção-de-mocó	Shr	-	15943
Croton blanchetianus Baill.	Marmeleiro	Shr	-	15937
Croton heliotropiifolius Kunth	Velame	Shr	-	15705
Euphorbia heterodoxa Müll. Arg.	Tinguí	Her	-	14576
Euphorbia hyssopifolia L.	Quebra-pedra	Her	-	14552
Jatropha mollissima (Pohl) Baill.	Pinhão-bravo	Tre	End	14547
Jatropha ribifolia (Pohl) Baill.	Pinhão-manso	Shr	End	15920
Manihot glaziovii Müll. Arg.	Mandioca-brava, maniçoba	Shr	End	16463
Sapium glandulosum (L.) Morong	Burra-leiteira	Tre	-	17875
Fabaceae				
Caesalpinioideae				
Bauhinia cheilantha (Bong.) Steud.	Pata-de-vaca, mororó	Tre	-	16492
Chamaecrista swainsonii (Benth.) H.S. Irwin and Barneby	Amendoim-bravo	Ssh	End	15694
Chamaecrista tenuisepala (Benth.) H.S. Irwin and Barneby	Amendoim-bravo-grande	Ssh	-	17510
Libidibia ferrea (Mart. ex Tul.) L.P.Queiroz	Pau-ferro	Tre	-	15904
Poincianella pyramidalis (Tul.) L.P.Queiroz	Catingueira	Tre	End	16459
Senna obtusifolia (L.) H.S. Irwin and Barneby	Mata-pasto	Her	-	17505
Senna occidentalis (L.) Link	Fedegoso	Her	-	17502
Senna uniflora (Mill.) H.S. Irwin and Barneby	Mata-pasto-cabeludo	Her	-	17511
Faboideae				
Aeschynomene mollicula Kunth	Chinani	Her	-	14607
Centrosema brasilianum (L.) Benth.	Feijão-de-gado	Her	-	14555
Centrosema pascuorum Mart. ex Benth.	Feijão-de-gado	Her	-	16509
Crotalaria retusa L.	Gergelim-bravo	Her	-	14635
Desmodium barbatum (L.) Benth.	Malícia	Her	-	15908
Desmodium glabrum (Mill.) DC.	Carrapicho	Her	-	15682
Indigofera sabulicola Benth.	Malícia-lisa	Her	-	16486
Indigofera suffruticosa Mill.	Anil	Her	-	17518
Macroptilium atropurpureum (Moc. and Sessé ex DC.) Urb.	Feijão-de-gado	Vin	-	14603
Tephrosia cimera (L) Pers.	Feijão-de-gado	Her	-	16488
Vigna adenantha (G. Mey.) Maréchal, Mascherpa and Stainier	-	Her	-	14577
Zornia brasiliensis Vogel	Amendoim-bravo	Her	-	17497
Mimosoideae				
Albizia inundata (Mart.) Barneby and J.W. Grimes	Tamarindo-bravo	Tre	-	15903
Anadenanthera colubrina (Vell.) Brenan	Angico-de-caroço	Tre	-	16510
Mimosa pigra L.	Calumbi	Shr	-	15693
Mimosa quadrivalvis L.	Unha-de-gato	Shr	-	17501
Mimosa tenuiflora (Willd.) Poir.	Jurema-preta, jurema-branca	Tre	-	17870
Parapiptadenia zehntneri (Harms) M. P. M. de Lima and H. C. de Lima	Angico-manjola	Tre	End	16458
Piptadenia stipulacea (Benth.) Ducke	Arranhento-branco	Tre	End	17508

Table 1. ***Continued.***

FAMILY / SPECIES	COMMON NAME	HABIT	CATEGORY	VOUCHER
Pithecellobium diversifolium Benth.	Carcará	Tre	End	15674
Senegalia bahiensis (Benth.) Seigler and Ebinger	Arranhento-vermelho	Tre	-	16467
Gentinaceae				
Schultesia doniana Progel	-	Her	-	16484
Hydroleaceae				
Hydrolea spinosa L.	Carqueja-do-mato	Her	-	16501
Lamiaceae				
Hyptis suaveolens (L.) Poit.	Alfazema-brava	Ssh	-	17512
Leonotis nepetifolia (L.) R. Br.	Cordão-de-são-francisco	Her	-	15885
Marsypianthes chamaedrys (Vahl) Kuntze	Cidreira	Her	-	17500
Rhaphiodon echinus Schauer	-	Her	-	15892
Loranthaceae				
Psittacanthus cordatus (Hoffmanns. ex Schult. f.) Blume	Enxerto-de-passarinho-grande	Hpa	-	20305
Lythraceae				
Cuphea racemosa (L. f.) Spreng.	Favala-brava	Her	-	17520
Cuphea sp.	Pimentinha	Her	-	17522
Malpighiaceae				
Galphimia brasiliensis (L.) A. Juss.	Pimentinha-brava	Her	-	16477
Ptilochaeta bahiensis Turcz.	Crina-crina	Tre	-	17873
Malvaceae				
Corchorus hirtus L.	Chinani	Her	-	17495
Herissantia crispa (L.) Brizicky	Mela-bode-grande	Her	End	16493
Herissantia tiubae (K. Schum.) Brizicky	Mela-bode-pequeno	Her	End	14623
Melochia tomentosa L.	Cipó-vermelho	Her	-	14565
Pseudobombax marginatum (A. St.-Hil., Juss. and Cambess) A. Robyns	Embira	Tre	-	17869
Sida galheirensis Ulbr.	Malva-branca	Her	End	16469
Sida spinosa L.	Vassourinha	Her	-	15697
Waltheria indica L.	Parente-do-cipó-vermelho	Her	-	15690
Waltheria rotundifolia Schrank	-	Her		14565
Molluginaceae				
Mollugo verticillata L.	Erva-rasteira	Her	-	16504
Myrtaceae				
Eugenia punicifolia (Kunth) DC.	Pitomba-de-cágado	Tre	-	17872
Psidium guajava L.	Goiabeira	Tre	-	14598
Nyctaginaceae				
Boerhavia diffusa L.	Pega-pinto	Her	-	16476
Guapira noxia (Netto) Lundell	João-mole	Tre	-	15918
Olacaceae				
Ximenia sp.	Ameixa-brava	Tre	-	20304
Onagraceae				
Ludwigia elegans (Cambess.) H. Hara	-	Ssh	-	16502
Ludwigia octovalvis (Jacq.) P.H. Raven	Mato-do-brejo	Her	-	16481
Oxalidaceae				
Oxalis divaricata Mart. ex Zucc.	-	Her	-	14551
Papaveraceae				
Argemone mexicana L.	Cansanção-espinhento	Her	-	14595
Plantaginaceae				
Angelonia biflora Benth.	Fumo-bravo	Her	End	16483
Stemodia maritima L.	Mato-do-riacho	Her	-	15676
Plumbaginaceae				
Plumbago scandens L.	Crista-de-galo	Her	-	17499
Poaceae				
Chloris gayana Kunth	Pé-de-papagaio	Her	-	15675
Dactyloctenium aegyptium (L.) Willd.	Pé-de-papagaio	Her	-	14614
Enteropogon mollis (Nees) Clayton	Capim-mimoso	Her	-	14570
Melinis repens (Willd.) Zizka.	Capim-pendão	Her	-	15671
Panicum trichoides Sw.	Guarda-ovalho	Her	-	14554
Paspalum fimbriatum Kunth	Marmelada-branca	Her	-	14627
Paspalum millegrana Schrad.	Arroz-bravo	Her	-	15889
Sorghum sp.	Capim-sempre-verde	Her	-	15890
Urochloa fusca (Sw.) B.F. Hansen and Wunderlin	Marmelada-vermelha	Her	-	16495

Table 1. ***Continued.***

FAMILY / SPECIES	COMMON NAME	HABIT	CATEGORY	VOUCHER
Polygalaceae				
Asemeia martiana (A.W. Benn.) J.F.B. Pastore and J.R. Abbott	Mentraste	Her	-	15946
Polygala boliviensis A.W. Benn.	Peixe-boi	Her	-	17517
Portulacaceae				
Portulaca oleracea L.	Berduega	Her	-	15945
Rhamnaceae				
Ziziphus joazeiro Mart.	Juazeiro	Tre	End	15906
Rubiaceae				
Chomelia obtusa Cham. and Schltdl.	Araçá-branco	Shr	-	16470
Diodella apiculata (Willd. ex Roem. and Schult.) Delprete	-	Her	-	14562
Machaonia brasiliensis (Hoffmanns. ex Humb.) Cham. and Schltdl.	Quixabeira-branca	Tre	-	16468
Mitracarpus sp.	-	Her	-	16505
Richardia grandiflora (Cham. and Schltdl.) Steud.	Erva-branca	Her	-	14563
Staelia sp.	Pega-ovelha	Her	-	14571
Tocoyena formosa (Cham. and Schltdl.) K. Schum.	Jenipapo-bravo	Tre	-	15936
Tocoyena sellowiana (Cham. and Schltdl.) K. Schum.	Jenipapo-bravo	Tre	-	16473
Santalaceae				
Phoradendron quadrangulare (Kunth) Griseb.	Enxerto-de-passarinho	Hpa	-	15938
Sapindaceae				
Averrhoidium gardnerianum Baill.	Maresia	Tre	End	16497
Cardiospermum sp.	Amarra-cachorro-pequeno	Vin	-	15704
Serjania glabrata Kunth	Amarra-cachorro	Vin	-	15923
Sapotaceae				
Sideroxylon obtusifolium (Humb. ex Roem. and Schult.) T.D. Penn.	Quixabeira	Tre	-	16464
Solanaceae				
Capsicum caatingae Barboza and Agra	Murta	Shr	-	16474
Schwenckia molissima Nees and Mart.	-	Her	-	15891
Solanum americanum Mill.	Pimenta-brava	Ssh	-	15702
Solanum gardneri Sendtn.	Malícia-de-espinho	Ssh	-	16487
Talinaceae				
Talinum patens Jacq.	Major-gomes	Her	-	15939
Turneraceae				
Piriqueta cistoides (L.) Griseb. subsp. *caroliniana* (Walter) Arbo	Azedim	Her	-	15912
Piriqueta guianensis N.E. Br. subsp. *elongata* (Urb. and Rolfe) Arbo	Malva	Her	-	16478
Piriqueta racemosa (Jacq.) Sweet	Malva	Her	-	-
Turnera hermannioides Cambess.	Chanana	Her	-	14586
Verbenaceae				
Lantana camara L.	Chumbinho	Ssh	-	15709
Lantana canescens Kunth	Camará	Ssh	-	14575
Lippia alba (Mill.) N.E. Br. ex Britton and P. Wilson	Erva-cidreira	Ssh	-	15888
Lippia pedunculosa Hayek	Pai-pedro	Ssh	R	15703
Lippia sp.	Alecrim	Ssh	-	14625
Violaceae				
Hybanthus calceolaria (L.) Oken	-	Her	-	16489
Vitaceae				
Cissus decidua Lombardi	Cipó	Vin	-	15700
Cissus simsiana Schult. and Schult. f.	Parreira	Vin	-	17509

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